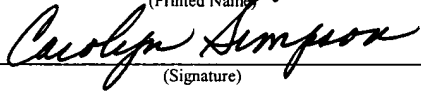




Atty. Dkt. No. 065640-0210

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Majid ENTEZARIAN et al.
Title: SEPARATION APPARATUS
Appl. No.: 10/632,805
Filing Date: 08/04/2003
Examiner: Hopkins, Robert A.
Art Unit: 1724

CERTIFICATE OF EXPRESS MAILING	
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INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56

Mail Stop AMENDMENT
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Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56.

A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

05/06/2005 AWONDAF1 00000095 10632805

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TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(c), before the mailing date of either a final action under 37 CFR §1.113, a notice of allowance under 37 CFR §1.311, or an action that otherwise closes prosecution in the application.

RELATED APPLICATIONS

The Examiner is hereby advised of the existence of the applications listed below which share at least some common disclosure with the above-identified patent application and/or which may serve as the basis of priority and/or otherwise relate to the above-identified patent application or one or more of the other patent applications listed below. For completeness, the above-identified application is also included in the list.

For each application, Applicant has also listed all substantive communications with the Patent Office and requests the Examiner to review the same as part of evaluating this patent application. These communications are available to the Examiner on the Patent Office's image file wrapper system. Therefore, copies of these communications are not enclosed. At the Examiner's request, Applicant would be happy to provide copies of any of these communications. Applicant notes that restriction requirements, preliminary amendments, etc. have not been listed although these may be easily accessed using the Patent Office's image file wrapper system. Also, the communications listed below are not listed on the Form PTO/SB/08 because in other situations they have been crossed off the SB/08 form to prevent them from being listed on the front of the patent even though they were considered by the Examiner. Applicant believes this is a more efficient way to bring these communications to the Examiner's attention. For completeness, communications in the above-identified application are also included in the list.



Identification No.	Filing Date	Title of Application
App. No.: 10/076,144 Abandoned	February 15, 2002	Filtration Media of Porous Inorganic Particles
PCT/US02/05753 Int'l Pub. No.: WO 02/070105	February 28, 2002	Filtration Media of Porous Inorganic Particles
– International Search Report, mailed on October 24, 2002 (a copy was provided with the Information Disclosure Statement dated March 24, 2005 as WO 02/070105 A3).		
Patent No.: 6,814,783 Patent App. Pub. No.: 2004/0011203 App. No.: 10/363,849	March 14, 2003	Filtration Media of Porous Inorganic Particles
– Non-Final Rejection, mailed on February 13, 2004. – Reply and Amendment, submitted on April 26, 2004. – Examiner Interview Summary Report, mailed on April 28, 2004.		
Patent App. Pub. No.: 2005/0028498 App. No.: 10/632,805 Pending	August 4, 2003	Separation Apparatus
– Non-Final Rejection, mailed on February 7, 2005.		
Patent App. Pub. No.: 2004/0139858 App. No.: 10/690,454 Pending	October 22, 2003	Filtration Media of Porous Inorganic Particles
App. No.: 10/699,573 Pending	October 31, 2003	High Capture Efficiency Baffle
Patent App. Pub. No.: 2005/0016376 App. No.: 10/866,250 Pending	June 14, 2004	Filtration Media
Patent App. Pub. No.: 2005/0002833 App. No.: 10/894,032 Pending	July 20, 2004	Filtration Media
– Non-Final Rejection, mailed on January 27, 2005. – Reply, submitted on April 28, 2005.		
PCT/US2004/023377 Int'l Pub. No.: WO 2005/017415 Pending	July 21, 2004	Separation Apparatus
App. No.: 10/934,636 Pending	September 3, 2004	Filtration Media of Porous Inorganic Particles
PCT/US2004/032311 Pending	October 19, 2004	High Capture Efficiency Baffle
– International Search Report and Written Opinion, mailed on March 1, 2005 (9 pages) (a copy was provided with the Information Disclosure Statement dated March 24, 2005).		

RELEVANCE OF EACH DOCUMENT

An English abstract for CN 1522958 states: “The production method of macroporous spherical silica gel includes the following processes: placing the sodium silicate solution and dilute sulfuric acid into a mixed-rotating granulating equipment to make step-by-step reaction and jet the above-mentioned materials into air by means of nozzle of said granulating equipment, then making polycondensation to produce gel granules, then making the gel granules undergo the processes of ageing, acid soaking, water washing and drying so as to obtain the macroporous spherical silica gel product or making the gel granules undergo the processes of acid soaking, water washing, ageing, secondary acid soaking and drying so as to obtain the macroporous spherical silical gel product whose mean pore size is 10-45 nm, mean pore volume is 1.00-2.20 ml/g and mean specific area is 200-550 sq.m/g.” Applicants were unable to obtain a copy of this document. This is the reason that this reference is not listed on the attached SB/08 form.

An English abstract for CN 1380248 states: “The present invention discloses a kind of a silica gel product, its mean grain size is 0.5-10 mm, mean specific surface area 10-1000 sq.m/g, mean pore volume 0.2-2.0 ml/g and stacking density is 300-850g/l. Said product is made up by adopting conventional silica gel production process, controlling reaction pH value at 7.2-9.0 or 5.0-6.8 and defining alkaline or acidic gel point so as to obtain the invented product. At least, 50% granular form is made into oblate spheroid form and/or go chessman form and/or spherical crown form.” Applicants were unable to obtain a copy of this document. This is the reason that this reference is not listed on the attached SB/08 form.

An English abstract for DE 199 06 318 states: “NOVELTY - For installation in a kitchen upper cabinet, the steam withdrawal hood involves at least one blower motor and several grease filters for cleaning air containing grease-loaded vapors. At least one grease filter (4) is incorporated in a divided vapor screen, which comprises a drawer-type withdrawable part and a fixed part. DETAILED DESCRIPTION - In the pushed-in state the withdrawable part (6.1) of the vapor screen (6) is arranged above the fixed part (6.2). The grease filter (4) is beneath the

withdrawable part and its one side (4.1) is pivotably arranged on two opposing sides of the vapor screen in a rotary point (8). A carbon filter (9) is provided between an upper grease filter (5) and the blower motor (3). USE - As a steam withdrawal hood for installation in a kitchen upper cabinet. ADVANTAGE - The hood, apart from having a suction surface which is as large as possible, also has a simple structure and the passage of unfiltered air to the blower is prevented. DESCRIPTION OF DRAWING(S) - The figure presents a side view of the steam withdrawal hood built into the cabinet part with a pushed-in vapor screen. Blower motor (3) Grease filter (4) One side of grease filter (4.1) Upper grease filter (5) Vapor screen (6) Withdrawable part of vapor screen (6.1) Fixed part of vapor screen (6.2) Rotary point (8) Carbon filter (9)”

An English abstract for DE 200 05 154 states: “NOVELTY - The chimney cowl may be used in a kitchen to take off smoke and steam and vapors and may include a filter to capture droplets of oil and fat. The filter may be installed in the bottom section (3) of the vertical flue and may slope at an angle to the horizontal. Joints (22) separate the bottom section from an intermediate section (4) and a top section (5). USE - Flue offtake for use in kitchen. ADVANTAGE - Simple structure of flue and fume hood. DESCRIPTION OF DRAWING(S) - The drawing shows a perspective view of a flue. Bottom section (3) Intermediate section (4) Top section (5) Joints (22).”

An English abstract for DE 198 10 818 states: “NOVELTY - The mobile extractor (1) is positioned over a cooking unit (2) on which food is being prepared and fumes and moisture are drawn into a duct (3) into a ventilation and filter unit (4) to be discharged (14). The height and reach of the hood (19) is variable. USE - For canteens and kitchens with multiple cooking areas. ADVANTAGE - May be accurately positioned where needed. DESCRIPTION OF DRAWING(S) - The drawing shows an isometric view of the extractor in position. Extractor (1) Cooker (2) Duct (3) Filter unit (4) Outlet (14) Hood (19)”

An English abstract for DE 299 06 345 states: “NOVELTY - Suspended air cleaning unit has an air cleaning set consisting of filter net layers enclosing a fleece layer and an active carbon layer. DETAILED DESCRIPTION - Unit includes cover plates (2) attached to the air inlet and

outlet, a frame plate (21) with a central bore (211) attached to the air inlet, and a holding plate (3) attached to the frame plate. The central bore of the frame plate is joined to an inlet (41) of a fan (4). An outlet (43) of the fan is joined to one end of an air duct whose other end is joined to the cover plate (2) of the air outlet. A cover housing (6) is fixed to the bottom end of the air inlet cover plate (2). This housing accommodates an air cleaning set (7) consisting of filter net layers (71, 72) with a fleece layer (73) and an active carbon layer (74) between them. USE - For air cleaning in offices, public buildings etc., in addition to air conditioning. ADVANTAGE - Polluted air rising into room upper regions can be effectively cleaned. DESCRIPTION OF DRAWING(S) - The drawing shows the suspended air cleaner. Cover plate (2) Holding plate (3) Fan (4) Cover housing (6) Air cleaning set (7) Frame plate (21) Filter net layers (71, 72) Fleece layer (73) Active carbon layer (74) Central bore (211)

An English abstract for DE 196 13 463 states: "A filter element for a gas filter, comprises a primary filter layer made of a fleece, tissue, paper, felt or other porous layers, and a secondary filter layer made of open pored material based on plastic, inorganic or organic substances. The open pores system is a recycled material or plant product, and the pore size ensures an adsorber function. The second filter layer preferably has a germ inhibiting fleece covering. Polyurethane foam is especially used. USE - The filter element is used in a gas filter. ADVANTAGE - The filter element is economical to produce."

From the figures, DE 295 11 237 appears to be related to filtration systems.

From the figures, DE 93 11 478 appears to be related to filtration systems.

An English abstract for DE 41 38 845 states: "The cartridge (20) has part sections (24) of the same opening profile, with preferred air flow through them. Other sections (25) block the through flow. Relative arrangement of the different sections can be adjusted according to the intake characteristics of the extractor fan (14). The intake side of the fan is at a min. vertical distance of 100 mm to the discharge side of the cartridge. The filter material (22) is a grease

filter. ADVANTAGE - Intake speed of air is maintained constant within a defined speed range, for even grease deposit.”

From the figures, DE 91 05 430 appears to be related to filtration systems.

An English abstract for DE 40 39 855 states: “A vacuum cleaner (1) has a fan (5) and a charcoal filter (3), and in circuit with the fan (5) is a device (7) for the prevention of smoke and fire. It closes the valve (17) in the air extract shaft (6) and interrupts the flow to the fan (5). The device (7) can be a fusible link or a thermostat. USE/ADVANTAGE - Prevents the spread of fire when overheating of fat threatens to ignite the charcoal filter.”

An English abstract for DE 37 12 279 states: “An air filter for fumes arising during soldering or plastic welding operations comprises a casing with an exhauster and a filter, also an air inlet and outlet. A first part of the casing with the filter has an air inlet which is detachably joined to a second part with the exhauster. The former part contains a prefilter and an activated carbon filter. A plate with through holes separates it from the second part. ADVANTAGE - Requires only a moderate amount of equipment for the complete removal of all harmful particles. The device is simple, portable and saves space.”

From the figures, DE 87 01 860 appears to be related to filtration systems.

An English abstract for DE 33 09 208 states: “1. Fume hood with an elongate extraction chamber, with an exit air connection for discharging extracted exit air and with a fresh air supply chamber and a fresh air collection chamber, between which heat exchange elements, through which fresh air can flow, of a recuperator are arranged which is provided in the extraction chamber of the hood and around which the exit air flows, characterized in that the fresh air supply chamber (5) and the fresh air collection chamber (6) are arranged in the region of the top side of the extraction chamber (3) each along one edge of the hood and extend over at least approximately the entire length of the hood, and that the heat exchange elements (26) are arranged transversely to the longitudinal direction of the hood.”

An English abstract for DE 81 02 859 states: "This device is provided with a suction fan and has a housing (1) in which a plurality of superposed filter elements (12, 14) is accommodated. A suction branch for the medium to be purified is provided in the lower housing region, and an outlet opening (20) for the purified medium is provided on the upper side of the housing. Below the lowest filter element (12) there is a pre-precipitation chamber, in which the suction fan is located. The superposed filter elements (12, 14) preferably consist of three filters, namely a pre-filter (12), a main filter and an after-filter (14), which can be replaced without great technical effort - for the pre-filter (12) and/or the main filter, a frame (15, 16) can be provided for this purpose, which can be inserted into the housing (1) from the side, and for the after-filter (14) a frame (17) can be provided which rests on a housing shoulder. In a preferred embodiment, the outlet opening (20) for the purified medium is provided in a housing hood (18) which, sealed under the action of its own weight, rests on the after-filter (14) or the frame (17) thereof. The device is preferably used for extracting and purifying welding fumes."

An English abstract for DE 24 44 741 states: "The gases, vapours, smoke etc. from the cookr or hearth rise up and are deflected by the deflector to and through a non-inflammable e.g. metal filter which separates the glowing particles entrained by the vapours. The gas etc. are then drawn up through the degreasing filter which is offset relative to the first filter so that degreasing is carried out away from the flames and heat of the cooker thus reducing the risk of fire. The temp. of the gases is reduced to below 100 deg.C before they reach the final filter by extending the time in which the gases etc. contact the walls of the filter device which is kept at a fairly low temp. since it is automatically cooled by the atmosphere. In the case of a charcoal fire, a further plate can be added just above the burning hearth to remove the solid particles."

From the figures, DE 74 17 517 and DE 2 206 904 appear to be related to filtration systems.

An English abstract for DE 2 163 183 states: "A suction chamber is open at the front to collect the spray mists, followed by a flat air permeable front filter and a back filter which is a water receiver mixing chamber acting as a flow channel for the air which ends in the lowest

water basin. The water receiver encloses the water surface in the basin and at its outlet is directed first up and then down toward the dirt collecting vessel separated from the basin and deflecting the air current upwards again so that the dirt particles cannot return. The sprays and mists are thus drawn in evenly over the entire surface of the suction device. Most of the particles are removed by the front filter and the preliminary purified air is passed into the elutriation system.”

From the figures, DE 2 035 789, DE 1 979 281, and DE 836 344 appear to be related to filtration systems.

An English abstract for EP 1 134 501 states: “The chimney cowl may be used in a kitchen to take off smoke and steam and vapors and may include a filter to capture droplets of oil and fat. The filter may be installed in the bottom section (3) of the vertical flue and may slope at an angle to the horizontal. Joints (22) separate the bottom section from an intermediate section (4) and a top section (5).”

An English abstract for EP 1 055 883 states: “NOVELTY - An electric drive (18) and control (40) are used to switch valve flap (16) between exhaust (C) to circulation (A) modes depending on the outside temperature (32) automatically. Circulation is automatically switched in below a pre-set temperature and exhaust above a second pre-set temperature. Between these two temperature levels the switching flap (16) is switched to an intermediate setting (B) offering part exhaust and part circulation. The valve is automatically controlled by the drive (18) control (40) as a function of temperature so as to switch to mode (B) when the outside temperature is within a pre-set range, using the connection between temperature sensor (32) and control (40). Fume filter (14) is operably connected to the drive (18) and thus switched into the air flow in exhaust mode and out of the air path during circulating action. USE - Domestic fume hoods and their control. ADVANTAGE - The switching valve offers exhaust, circulating and intermediate mixed modes of operation as an automatic function of outside temperature. DESCRIPTION OF DRAWING(S) - The drawing shows the fume hood in vertical section. hood (4) fat filter (6) blower (8) air flow (9) housing (10) hood funnel (11) fume filter (14) flap valve (16) electric

drive (18) connectors (26) vent (28) circulating channel (29) temperature sensor (32) signal lines (36,38) control (40) circulating mode (A) intermediate mode (B) exhaust mode. (C).”

An English abstract for EP 0 974 790 states: “NOVELTY - The system has a flue pipe attached to a wall or ceiling and cont. a fan (9), a filter system, a screen, an illumination arrangement (12) and an electrical controller for the fan and illumination arrangement. The active mechanical, electrical, electronic and electric motor devices (9,12) required for the operation of the hood and their connectors, electrical connections and the fume filters (15,16) are combined into a base unit (7) and mounted as a module in a tubular housing. The base unit can be optionally mounted on the side walls or ceiling of the room. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of producing a fume extraction hood system. USE - For fume extraction for different types of equipment. ADVANTAGE - Different types of equipment can be fitted with fume extraction hood systems using a common technology and base unit. DESCRIPTION OF DRAWING(S) - The drawing shows a schematic representation of a base unit base unit (7) fan (9) illumination arrangement (12) filters (15,16).”

An English abstract for EP 0 857 508 states: “A separation process comprises passing a gas or vapour stream contaminated with an undesired substance or contaminant downwardly through a plurality of spiral separating media such that the direction of movement of the gas or vapour stream is transversely the longitudinal axes of at least some of the spiral separating media. The undesired substance or contaminant is allowed to separate from the gas or vapour as it passes through the bed, and purified gas or vapour is withdrawn from the bed.”

An English abstract for EP 0 726 428 states: “A laminar air flow safety work-bench is covered by a housing incorporating one or more access openings, a filter, and means by which air to be filtered is guided. The novelty is that the filter (1) is a composite material made of two or more fibre layers separated by a third absorbent layer. USE - The bench protects the user and surrounding workers from exposure to harmful substances in esp. pharmaceutical, biological, chemical and electronic industry laboratories. Further, the product is protected from harmful environmental influences. The active carbon or zeolite filter replaces filters made of non-woven

fibres or fleece. ADVANTAGE - The level of protection is enhanced for both the user and the product.”

An English abstract for EP 0 722 071 states: “The invention relates to a hood for the suction and/or the filtration of cooking fumes in a domestic kitchen, having means (12,17) which allows in a simple and rapid way to direct the air flow inhaled from a cooking hob towards a preferred outlet, among a plurality of possible outlets (13-16) being provided by the hood, and to simultaneously commute the operation of the hood from a filtration mode to a suction mode.”

An English abstract for EP 0 612 962 states: “The extractor hood has a number of adjacent grease separation cells (1), each with a collection space (2) which is open at the bottom and a suction opening (4) leading to an extraction duct (3) via a grease filter (5). A shutter carrier (7) lies adjacent the suction opening of each cell, the carriers of all cells, adjusted in common transverse to the suction openings to adjust the position of the shutter plates (8) between a closed and open position of the suction opening. Pref. the extractor hood incorporates two lights using tubular light sources (24) housed in sealed spaces at the front and rear of the hood, each sealed by a transparent safety glass cover. ADVANTAGE - Rapid adjustment between different operating modes.”

An English abstract for EP 0 443 673 states: “The noxious vapours and gases in waste gas from paint spraying booths, hardening plant or other industrial installations are made harmless by flameless combustion at 800-1000 deg.C, producing only water vapour and CO₂. In suitable stack appts., an electrically driven fan (3) sucks the mixt. from a base inlet (2) through a series of superimposed compartments. After lower compartments (4) where fabric filters trap entrained solids from the polluted mixt. is a chamber (6) contg. active carbon filters, followed by a buffer chamber (7) contg. sensors (9) whose diffusion potential is altered by hydrocarbons or organic derivs. and activate the control circuit for valves (8,12). A by-pass pipe (11) holds the combustion element (13), only operated when the sensors open a valve (12) i.e. when the other valves are closed. The adsorption filters are pref. regenerated in a normal manner.

ADVANTAGE - Reduces atmos. contamination by environmentally damaging prods. also presenting health hazards.”

An English abstract for EP 0 443 301 states: “A kitchen ventilator comprises a housing (10) provided with a suction fan (11). An inlet member (16) is movably connected to the housing so as to be vertically adjustable and has at least one inlet opening (17) connected to the suction fan (11) via a duct (18). The inlet member (16) may optionally be provided with a heat radiant source (20).”

An English abstract for EP 0 398 847 states: “The invention relates to an air filter, which has been specifically designed for filtering air of civil and industrial environments, characterized in that it comprises, in combination: at least a filtering adsorbing layer, at least a physical filtering layer and at least one or two chemical reaction filtering layers operating based on an acid/base and base/acid reaction with the gaseous substances to be filtered.”

An English abstract for EP 0 301 640 states: “The suction hood for fumes, especially for domestic kitchens, according to this invention possesses a centrifugal rotor with vertical axis, closed at the bottom, keyed to the shaft of a motor supported with its axis vertical inside a suction opening present in the upwardly facing wall of a spiral guide shell of increasing cross-section, leading to a discharge duct and/or a recirculation grill, which guide shell possesses a closed bottom wall, situated above the bottom wall, having apertures and facing the collection area of the hood of an external casing, which encloses and supports the guide shell, and defines, above the guide shell itself, a zone communicating with its suction opening, there being also present a discharge duct equipped with sound absorption means.”

An English abstract for EP 0 298 000 states: “The present invention relates to a fume purification system used in conjunction with food cooking equipment. The fumes which are generated during cooking pass through a plurality of filter balls (11) washed by an oxidizing liquid (13) which removes the greasy contaminants from the said fumes. A cooling coil (17) is also used in conjunction with the filter balls (11) to accelerate the condensation of the fumes. If

required, a charcoal filter (6) is placed before the purified air is returned to the atmosphere or recirculated in the system.”

An English abstract for EP 0 263 892 states: “A method of preventing smoke curling from beneath depending enclosure walls of a grease extraction ventilator, (V) comprises providing a series of apertures (10, 11) in the walls (12-15) from adjacent the lower edge thereof for a predetermined distance upwardly. The apertures are preferably comparatively small and relatively closely spaced, being preferably placed in parallel rows, also parallel to the lower edge of the wall, with the apertures of adjacent rows. The number of rows may be varied, depending on the height of the wall and the capacity of the ventilator, with additional apertures for a ventilator having a larger capacity. The apertures may be slots, such as relatively short, and with the spacing between parallel rows being equal to or less than the height of the slots, with the lowest row being relatively close to the lower edge of the wall. Or, the apertures may be circular or having other shapes, such a oval, elliptical or the like. A device for preventing smoke rollout consists in apertures in the depending walls of an enclosure into which pass heated products of cooking, positioned as described in connection with the method.”

An English abstract for EP 0 121 809 states: “Fume hood with an elongate extraction chamber, with an exit air connection for discharging extracted exit air and with a fresh air supply chamber and a fresh air collection chamber, between which heat exchange elements, through which fresh air can flow, of a recuperator are arranged which is provided in the extraction chamber of the hood and around which the exit air flows, characterised in that the fresh air supply chamber (5) and the fresh air collection chamber (6) are arranged in the region of the top side of the extraction chamber (3) each along one edge of the hood and extend over at least approximately the entire length of the hood, and that the heat exchange elements (26) are arranged transversely to the longitudinal direction of the hood. (9pp) DE 3309208 A The extractor hood has an elongated suction chamber (3) in which the heat exchange elements (26) are mounted transverse to the longitudinal extension. At the top of the suction chamber there is a header chamber (5) for the incoming air and a collecting chamber (6) which extend more or less

over the entire length of the hood. Setting the heat exchange elements across the longitudinal direction produces a larger entry surface for the incoming air, so that even where a great deal of incoming air is required optimum flow conditions prevail. There is also a greater heat exchange surface per meter of hood. ADVANTAGE - Increased utilisation of the heat content of the waste air.”

An English abstract for EP 0 046 137 states: “Within the body (1) of the hood, a circular baseplate (4) is fixed between two rings (2,3) and carries a motor (5) on fixing brackets (6). The motor is surrounded by a protective chimney (7). The axial shaft (9) of the motor drives a corrugated or folded rotor (13) formed of e.g. woven fibre or blotting-paper with a rough surface, which extracts and retains solid and liq. particles of all sizes from the air drawn through an inlet (18). The air is expelled through holes (8) in the baseplate (4), and pollutants in its are neutralised chemically by a standard output filter (21). A fixed serpentine or tapered aerodynamic seal (20) underlying but not touching the rotor (13) prevents any recirculation of air once drawn through the inlet (18). The hood is lightweight, compact and independent of any ducting, and requires only a low- voltage single-phase AC supply.”

An English abstract for EP 0 007 385 states: “A filter for removing greasy or oily particles from a gas flow, esp. from air extracted from a kitchen, comprises a large number of parallel rods distributed over the entire cross-section through which the gas flows. In a pref. embodiment, several sets of the rods are arranged in rows behind one another in the direction of flow of the gas, the rods of one row being staggered relative to the next row and so on. The width of the gaps between the rods is at most equal to twice the width of the rods in the next row and preferably is equal to the width of those rods. Oily and greasy substances trapped on the rods flow downwards continuously so that the filter is self-cleaning.”

An English abstract for FR 2 768 942 states: “NOVELTY - Filter for treating gaseous effluents to suppress odours, with a cyclonic exchange filter, at least one active carbon filter and at least one filter made of active carbon fibres. Filter cassette made of a sealed envelope with an inlet and outlet at opposite ends, containing a cylindrical filter element of the same length sealed

to its sides. One end of the cassette moves to exchange elements. DETAILED DESCRIPTION - The filter also contains means of spraying water upstream of the active carbon filters, at the outlet to the cyclonic exchanger filter. A droplet filter is also placed upstream of the active carbon filters. The filter contains several active carbon filters of different microporosity arranged in decreasing size in the direction of gas flow. The first of these has micropores of 30nm and the second of 10nm. The active carbon fibre filter has a microporosity of at most 1nm. At least one element is made of active carbon tissue, supported by a support material which is permeable to the gas. This support is a mesh, net or metal tissue. The active carbon fibres are generally wavy and the active carbon filters are mounted inside a cylindrical or parallelepiped cassette. These cassettes are heated by infrared radiation of less than 2mm wavelength, to raise the temperature during desorption. USE - Removal of Industrial kitchen or restaurant smells. ADVANTAGE - No need for high dilution, with replaceable cassettes which can be regenerated quickly and effectively. DESCRIPTION OF DRAWING(S) - Filter installation Cyclonic exchanger (60) Water spray (80) Droplet filter (90) Active carbon filter (70) Active carbon filter support (102)."

An English abstract for FR 2 432 255 states: "The electrical heating system has convector units each having an individual electronic thermostat and a potentiometer(P1) setting the overall chosen temperature. A differential amplifier(A1) allows the local light level to automatically lower the overall heating requirement. It allows setting errors due to the inclusion of the temperature lowering circuit(D) to be compensated for by connecting this circuit in parallel with the temperature sensor(Th) or with the potentiometer. A second potentiometer(P2) can also be included, controlling night temperature and the former, day temperature. Potentiometer selection(R1) is then governed by the ambient light sensor(L). The light sensing element is connected in the emitter-collector loop of an NPN transistor(T) which controls the setting of the selector switch via a relay."

An English abstract for FR 2 338 092 states: "The suction cowl has a filter panel in the front face for the gases drawn in by a fan inside the housing. On the top edge of the housing is a hinged shutter with front and side sections, there being a transparent panel in the front section. In

front of the filter panel (2) is a heater (17), and the housing has a deflector (19) returning the filtered gases propelled by the fan (5) to the base of this heater. The deflector can be attached to the housing top face, having a pivoting shutter (21) at this point to control the air pressure. There can be a further adjustable shutter on the deflector to regulate combustion.

From the figures, FR 2 244 558 appears to be related to filtration systems.

An English abstract for FR 2 066 045 states: "The purifying appts. is intended for the removal of greasy and odorous particles from the hot, humid air derived from cooking and frying operations. It is housed in a parallelepiped envelope fitted with hoods and pipe connections. The envelope is subdivided by air deflectors into individual, superimposed air channels which guide the air to be purified through filters placed side-by-side in the channels. The air passes obliquely upwards through moist absorbent filters and then downwards through dry adsorbent filters; the filters are fixed in frames, placed in guides so that they can be withdrawn easily and replaced. The filters, in combination, remove the objectionable cooking smell in a satisfactory and inexpensive manner."

An English translation of the foreign-language documents is not readily available. However, the absence of such translation does not relieve the PTO from its duty to consider the submitted foreign language documents (37 CFR §1.98 and MPEP §609).

Applicants respectfully request that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.



Atty. Dkt. No. 065640-0210

FEE

A fee in connection with submission of an information disclosure statement under 37 CFR §1.97(c) in the amount of \$180.00 in accordance with 37 CFR §1.17(p) is attached.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1447.

Respectfully submitted,

Date May 4, 2005

FOLEY & LARDNER LLP
Customer Number: 22428
Telephone: (414) 297-5664
Facsimile: (414) 297-4900

By Jason E. Pauls
Jason E. Pauls
Attorney for Applicant
Registration No. 45,651

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Date Submitted: May 4, 2005

(use as many sheets as necessary)

Sheet 1 of 3

Complete if Known

Application Number	10/632,805
Filing Date	08/04/2003
First Named Inventor	Majid ENTEZARIAN
Group Art Unit	1724
Examiner Name	Hopkins, Robert A.
Attorney Docket Number	065640-0210

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name Of Patentee Or Applicant Of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	A1	2,978,064		Deaver	04-04-1961	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	A1	DE	199 06 318	A1	Hondmann et al.	08-17-2000		
	A2	DE	200 05 154	U1	Burcher	07-13-2000		
	A3	DE	198 10 818	A1	Frank	09-16-1999		
	A4	DE	299 06 345	U1	Shih	08-12-1999		
	A5	DE	196 13 463	A1	Schwan et al.	10-09-1997		
	A6	DE	295 11 237	U1	Eisfink Carl Fink GmbH	06-05-1996		X
	A7	DE	93 11 478	U1	BHL-Blechbearbeitungs GmbH	11-11-1993		
	A8	DE	41 38 845	A1	Schmid et al.	05-27-1993		
	A9	DE	91 05 430	U1	Bosch-Siemens Hausgerate GmbH	10-15-1992		
	A10	DE	40 39 855	A1	Bohnet	06-17-1992		
	A11	DE	37 12 279	A1	Bodrich	10-20-1988		
	A12	DE	87 01 860	U1	Burcher	05-14-1987		
	A13	DE	33 09 208	A1	Schmalhofer	09/20/1984		
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	A17	DE	2 206 904		Dannemann et al.	09-06-1973		
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	A25	EP	0 857 508	B1	Van Niekerk	08-12-1998		
	A26	EP	0 726 428	B1	Gunter	08-14-1996		

Examiner
SignatureDate
Considered

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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: May 4, 2005 <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/632,805
				Filing Date	08/04/2003
				First Named Inventor	Majid ENTEZARIAN
				Group Art Unit	1724
				Examiner Name	Hopkins, Robert A.
				Attorney Docket Number	065640-0210
Sheet	2	of	3		

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		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	A27	EP	0 722 071	B1	Pettinari	07-17-1996		
	A28	EP	0 612 962	B1	Stegmaier	08-31-1994		
	A29	EP	0 443 673	B1	Poppelaars	08-28-1991		
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	A33	EP	0 298 000	A2	Csabai	01-04-1989		
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	A44	GB	2 340 053		More	02-16-2000		
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	A48	GB	1 551 487		Bosch-Siemens	08-30-1979		
	A49	GB	2 002 106		PRL SOC	02-14-1979		
	A50	GB	1 436 710		Bauknecht	05-26-1976		
	A51	GB	1 434 847		Mayer	05-05-1976		
	A52	WO	97/45189		Marra et al.	12-04-1997		

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Attorney Docket Number	065640-0210

Sheet	3	of	3
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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A53	Aerosol Science, Davies, C.N., 1966, 6 pages, Academic Press, London and New York.	
	A54	Aerosols; Science, Technology, and Industrial Applications of Airborne Particles, Liu, Benjamin Y.H., Pui, David Y.H., and Fissan, Heinz J., September 17-21, 1984, 6 pages, Minneapolis, MN.	
	A55	CRC Handbook of Environmental Control, Vol. I: Air Pollution; Richard G. Bond and Conrad P. Straub, 1972, 3 pages, CRC Press, Cleveland, OH.	
	A56	Desiccant Silica Gel, Silicagel.net, available by at least October 7, 2003, 2 pages.	
	A57	Fuchs, N.A., The Mechanics of Aerosols, Karpov Institute of Physical Chemistry, Moscow, 1964, 4 pages, The MacMillan Company, NY.	
	A58	Greenheck, Grease Grabber Filter Style Kitchen Hood, February 2005, 1 page, Greenheck Fan Corp.	
	A59	Heating, Ventilating and Air-Conditioning, Systems and Equipment, 1996 ASHRAE Handbook, 5 pages, American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Atlanta, GA.	
	A60	Heating, Ventilating, and Air-Conditioning, Applications, 1999 ASHRAE Handbook, 6 pages, American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Atlanta, GA.	
	A61	Hinds, William C., Aerosol Technology; Properties, Behavior; and Measurement of Airborne Particles, 1999, 5 pages, John Wiley & Sons.	
	A62	Jin, Do Won, et al., FTIR Study of Adsorption on Silica Gel for Organic Solvents Diluted in Supercritical Carbon Dioxide, Journal of Chemical Engineering of Japan, abstract, 1996, 1 page.	
	A63	Latest Development, Meigao Chemical Co., Ltd., copyright date of 2002-2005, 3 pages.	
	A64	Scott, RPW, Liquid Chromatography, obtained from http://www.chromatography-online.org/HPLC/Stationary-Phases/Silica-Gel/rs41.html , marked with 2002-2003 copyright date, 11 pages.	
	A65	Sell, Nancy J., Industrial Pollution Control, Issues and Techniques; 1981, 7 pages, Van Nostrand Reinhold Company.	
	A66	Silica Gel, Grace Davison, available at least as of March 8, 2005, 2 pages.	
	A67	Standard Handbook for Mechanical Engineers, Baumeister, Theodore, Editor, Seventh Edition, 1967, 3 pages, McGraw-Hill, Inc.	

Examiner Signature		Date Considered	
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